

Transdisciplinary Tobacco Use Research Centers (TTURCs): A Decade of Transdisciplinary Tobacco Use Science

2009 Joint Conference of SRNT and SRNT-Europe

Dublin, Ireland

Pre-meeting Symposium, Monday, April 27, 2009 1–5 p.m.

2009 marks the 10th anniversary of the TTURCs initiative, funded by the National Institutes of Health. This pre-conference symposium will highlight exemplary science from the centers, ranging from basic behavioral and biobehavioral research, to clinical trials, to policy studies. Speakers will discuss progress, the contribution of the initiative, and value added by a transdisciplinary approach to tobacco control, treatment, and prevention.

Opening Remarks, 1:00 – 1:10 p.m. (10 minutes)

Glen Morgan, *Tobacco Control Research Branch, National Cancer Institute*

Session I, 1:10 – 1:55 p.m. (45 minutes)

Smoking Acquisition: Social, Genetic, and Neural Factors

- **Intergenerational transmission of nicotine dependence phenotypes**
Raymond Niaura, *Butler Hospital, Brown University*
- **An fMRI study of smokers performing an inhibitory control task: Neural correlates of early life stress**
Richard Mulligan, *Butler Hospital, Brown University*
- **Social and affective decision underpinnings of tobacco and alcohol abuse: Social and neurocognitive affective decision implications for prevention and treatment**
C. Anderson Johnson, *Claremont Graduate University*

Session II, 1:55 – 2:40 p.m. (45 minutes)

This is Your Brain on Nicotine: Neural and Behavioral Substrates of Nicotine and Abstinence Effects

- **Reducing nicotine delivery to the brain: Impact on nicotine addiction**
Paul Pentel, *University of Minnesota*
- **Behavioral and molecular mechanisms of cognitive deficits in nicotine withdrawal**
Thomas J. Gould, *Temple University*
- **Targeting cognitive deficits in medication development for nicotine dependence**
Caryn Lerman, *University of Pennsylvania*

Break, 2:40 – 2:50 p.m. (10 minutes)

Session III, 2:50 – 3:35 p.m. (45 minutes)

Smoking Cessation Treatment: From the Laboratory to the Real World

- **Smoking lapse models facilitate translational work in medications development**
Sherry McKee, *Yale University*
- **Should we emphasize the risks of smoking or the beliefs of quitting to enhance success? Implications from prospect theory**
Stephanie O'Malley, *Yale University*
- **Treating tobacco dependence: Efficacy and real-world effectiveness of five different therapies**
Michael C. Fiore, *University of Wisconsin*

Session IV, 3:35 – 4:20 p.m. (45 minutes)

Tobacco Products and Policies: National and International Research

- **Noncombustible tobacco products: A harm reduction approach?**
Dorothy K. Hatsukami, *University of Minnesota*
- **The ITC Project as a vehicle for learning about tobacco products and their users**
Richard O'Connor, *Roswell Park Cancer Institute*
- **The contribution of pack health-warnings to tobacco control: findings from the ITC Project**
Ron Borland, *VicHealth Centre for Tobacco Control, The Cancer Council Victoria*

Concluding Remarks, 4:20 – 4:45 p.m. (25 minutes)

Robert T. Croyle, *Director, Division of Cancer Control and Population Sciences, National Cancer Institute*

The Transdisciplinary Tobacco Use Research Centers (TTURCs) are funded by the National Cancer Institute (NCI), National Institute on Drug Abuse (NIDA), and the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Originally released in 1999, this initiative was re-issued in 2004 and awarded to seven academic institutions. The TTURC project fosters unique collaborations among scientists across many disciplines. Researchers tackle a wide range of studies spanning new models of nicotine addiction, the role of genetic and environmental factors in smoking initiation and persistence, the impact of policy on tobacco use, methods for preventing tobacco use across cultures, and determinants of relapse.

UNIVERSITY OF WISCONSIN (UW TTURC), <http://www.ctri.wisc.edu/>

Tobacco Dependence: Treatment and Outcomes – Timothy B. Baker, Ph.D., PI

The UW TTURC has assembled an interdisciplinary team to conduct four research projects to advance the understanding and effectiveness of tobacco dependence treatment and prevent smoking relapse. Research programs focus on improving our assessment and understanding of nicotine dependence; exploring factors that cause or modulate relapse risk; identifying genetic influences on nicotine dependence and cessation success; and testing smoking cessation interventions and determining their mechanisms of action.

ROSWELL PARK CANCER INSTITUTE (Roswell Park TTURC), <http://roswelltturc.org/>

Building the Evidence Base for Tobacco Control Policies – K. Michael Cummings, Ph.D., PI

The goal of the Roswell Park TTURC is to expand the science base for policy approaches for controlling tobacco by fostering transdisciplinary research that can lead to rigorous evaluation and a more fully developed and empirically based model of how and why policies influence tobacco related behaviors.

UNIVERSITY OF MINNESOTA (UM TTURC), <http://www.tturc.umn.edu/>

Tobacco Exposure Reduction – Dorothy K. Hatsukami, Ph.D., PI

The primary objective of the UM TTURC research is to examine various aspects of tobacco harm reduction among smokers who continue to use tobacco products. More specifically, the aims of the TTURC are to develop methods and measures to evaluate tobacco products; to use these measures to assess potential reduced exposure products; and through these assessments, determine future directions in policies and programs for tobacco harm reduction.

CLAREMONT GRADUATE UNIVERSITY, Pacific Rim Transdisciplinary Tobacco and Alcohol Use Research Center (CGU-PR TTURC), <http://ipr1.hsc.usc.edu/tturc2/>

Genes, Environment & Tobacco Use Across Cultures – C. Anderson Johnson, Ph.D., PI

The CGU-PR TTURC has investigated how social circumstance, cultural setting, dispositional phenotype and genes might influence the course of tobacco and alcohol use trajectories in youth, and how they moderate the effectiveness of programs for tobacco and alcohol abuse prevention. The research has evolved to explore neurocognitive mechanisms that mediate these relationships.

UNIVERSITY OF PENNSYLVANIA (UPENN TTURC), <http://www.med.upenn.edu/tturc/>

Translating Basic Science to Improve Tobacco Dependence Treatment – Caryn E. Lerman, Ph.D., PI

The mission of the UPENN TTURC is to translate discoveries in basic neuroscience, pharmacology, genetics, and behavioral science to improve the treatment of nicotine dependence.

BROWN UNIVERSITY, Butler Hospital (TTURC)

Nicotine Dependence: Phenotype, Endophenotype & Contexts – Raymond Niaura, Ph.D., PI

This TTURC aims to identify familial, early childhood and lifetime biopsychosocial pathways that determine lifetime patterns of smoking uptake, use and cessation and the associated patterns of dependence.

YALE UNIVERSITY (Yale TTURC), <http://info.med.yale.edu/century/>

Tobacco Dependence & Risk Factors for Treatment Failure – Stephanie O'Malley, Ph.D., PI

The Yale TTURC is conducting research to improve the treatment of tobacco dependence by studying the underlying factors associated with treatment failure, and developing novel behavioral and pharmacological treatments to address these factors. The focus is on smokers most resistant to current treatments, including those with alcohol use, depressive symptoms and female gender.

